



Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

August 27, 2012

Sandy Wackett
DEQ LABORATORY
602 N. Fifth St.
Baton Rouge, LA 70802

RE: Project 20143290
Project ID: BAYOU CORNE

Dear Sandy Wackett:

Enclosed are the analytical results for sample(s) received by the laboratory on August 23, 2012. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Cindy Olavesen".

Cindy Olavesen
cindy.olavesen@pacelabs.com



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Project: 20143290

Client: DEQ LABORATORY

Project ID: BAYOU CORNE

Washington Department of Ecology C2078
Oregon Environmental Laboratory Accreditation - LA200001
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119
Pennsylvania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC) T104704405-09-TX
Kansas Department of Health and Environment (NELAC) E-10266
Florida Department of Health (NELAC) E87595
Oklahoma Department of Environmental Quality - 2010-139
Illinois Environmental Protection Agency - 0025721
California Env. Lab Accreditation Program Branch - 11277CA
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006





Sample Cross Reference

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20143290

Client: DEQ LABORATORY

Project ID: BAYOU CORNE

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
314 082312007 98	201015976	Water	23-Aug-12 11:18	23-Aug-12 14:30
314 082312007 98 FB	201015977	Water	23-Aug-12 11:18	23-Aug-12 14:30
314 082312007 131 FB	201015978	Water	23-Aug-12 11:00	23-Aug-12 14:30
314 082312007 131	201015979	Water	23-Aug-12 11:00	23-Aug-12 14:30
314 082312007 90	201015984	Water	23-Aug-12 11:55	23-Aug-12 14:30
314 082312007 90 FB	201015986	Water	23-Aug-12 11:55	23-Aug-12 14:30
314 082312007 89 FB	201015988	Water	23-Aug-12 00:00	23-Aug-12 14:30
314 082312007 89	201015990	Water	23-Aug-12 11:55	23-Aug-12 14:30
314 082312007 88	201015992	Water	23-Aug-12 11:30	23-Aug-12 14:30
314 082312007 88 FB	201015994	Water	23-Aug-12 11:30	23-Aug-12 14:30



Project Narrative

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20143290

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

All LCS recoveries were within QC limits.

Matrix Spikes and Duplicates:

All MS/MSD recoveries or duplicate RPDs were within QC limits.

Surrogates:

All surrogate recoveries were within QC limits.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: DEQ LABORATORY

Client ID: 314 082312007 98

Project: 20143290

Project ID: BAYOU CORNE

Site: None

Lab ID: 201015976

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 191126

Method: EPA 8260

Collected: 23-Aug-12

Received: 23-Aug-12

GCMS VOAs Water

Prepared: 23-Aug-12

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.00500	0.00500	23-Aug-12 19:03 RMP
100-41-4	Ethylbenzene	1	ND		0.00500	0.700	23-Aug-12 19:03 RMP
108-88-3	Toluene	1	ND		0.00500	1.00	23-Aug-12 19:03 RMP
	m&p-Xylene	1	ND		0.00500	10.0	23-Aug-12 19:03 RMP
95-47-6	o-Xylene	1	ND		0.00500	10.0	23-Aug-12 19:03 RMP

5 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Protocol 8/27/2012 10:04:41
Limits are corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: DEQ LABORATORY

Client ID: 314 082312007 98 MS 1

Project: 20143290

Project ID: BAYOU CORNE

Site: None

Lab ID: 201015976 MS 1

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 191126

Method: EPA 8260

Collected: 23-Aug-12

Received: 23-Aug-12

GCMS VOAs Water MS

Prepared: 24-Aug-12

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
71-43-2	Benzene	1	53.0		5.00		24-Aug-12 09:05 RMP
100-41-4	Ethylbenzene	1	50.6		5.00		24-Aug-12 09:05 RMP
108-88-3	Toluene	1	49.3		5.00		24-Aug-12 09:05 RMP
	m&p-Xylene	1	105.		5.00		24-Aug-12 09:05 RMP
95-47-6	o-Xylene	1	51.3		5.00		24-Aug-12 09:05 RMP

5 compound(s) reported

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Protocol 8/27/2012 10:04:41
Limits are corrected for sample size, dilution and moisture content if applicable.

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Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: DEQ LABORATORY

Client ID: 314 082312007 98 MSD 1

Project: 20143290

Project ID: BAYOU CORNE

Site: None

Lab ID: 201015976 MSD 1

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 191126

Method: EPA 8260

Collected: 23-Aug-12

Received: 23-Aug-12

GCMS VOAs Water MS

Prepared: 24-Aug-12

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
71-43-2	Benzene	1	52.4		5.00		24-Aug-12 09:25 RMP
100-41-4	Ethylbenzene	1	50.4		5.00		24-Aug-12 09:25 RMP
108-88-3	Toluene	1	48.4		5.00		24-Aug-12 09:25 RMP
	m&p-Xylene	1	106.		5.00		24-Aug-12 09:25 RMP
95-47-6	o-Xylene	1	51.6		5.00		24-Aug-12 09:25 RMP

5 compound(s) reported

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Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: DEQ LABORATORY

Client ID: 314 082312007 98 FB

Project: 20143290

Project ID: BAYOU CORNE

Site: None

Lab ID: 201015977

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 191126

Method: EPA 8260

GCMS VOAs Water

Collected: 23-Aug-12

Received: 23-Aug-12

Prepared: 23-Aug-12

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.00500	0.00500	23-Aug-12 20:02 RMP
100-41-4	Ethylbenzene	1	ND		0.00500	0.700	23-Aug-12 20:02 RMP
108-88-3	Toluene	1	ND		0.00500	1.00	23-Aug-12 20:02 RMP
	m&p-Xylene	1	ND		0.00500	10.0	23-Aug-12 20:02 RMP
95-47-6	o-Xylene	1	ND		0.00500	10.0	23-Aug-12 20:02 RMP

5 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Protocol 8/27/2012 10:04:41
Limits are corrected for sample size, dilution and moisture content if applicable.

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Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: DEQ LABORATORY

Client ID: 314 082312007 131 FB

Project: 20143290

Project ID: BAYOU CORNE

Site: None

Lab ID: 201015978

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 191126

Method: EPA 8260

GCMS VOAs Water

Collected: 23-Aug-12

Received: 23-Aug-12

Prepared: 23-Aug-12

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.00500	0.00500	23-Aug-12 20:22 RMP
100-41-4	Ethylbenzene	1	ND		0.00500	0.700	23-Aug-12 20:22 RMP
108-88-3	Toluene	1	ND		0.00500	1.00	23-Aug-12 20:22 RMP
	m&p-Xylene	1	ND		0.00500	10.0	23-Aug-12 20:22 RMP
95-47-6	o-Xylene	1	ND		0.00500	10.0	23-Aug-12 20:22 RMP

5 compound(s) reported

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Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: DEQ LABORATORY

Client ID: 314 082312007 131

Project: 20143290

Project ID: BAYOU CORNE

Site: None

Lab ID: 201015979

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 191126

Method: EPA 8260

Collected: 23-Aug-12

Received: 23-Aug-12

GCMS VOAs Water

Prepared: 23-Aug-12

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.00500	0.00500	23-Aug-12 20:42 RMP
100-41-4	Ethylbenzene	1	ND		0.00500	0.700	23-Aug-12 20:42 RMP
108-88-3	Toluene	1	ND		0.00500	1.00	23-Aug-12 20:42 RMP
	m&p-Xylene	1	ND		0.00500	10.0	23-Aug-12 20:42 RMP
95-47-6	o-Xylene	1	ND		0.00500	10.0	23-Aug-12 20:42 RMP

5 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Protocol 8/27/2012 10:04:41
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Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: DEQ LABORATORY

Client ID: 314 082312007 90

Project: 20143290

Project ID: BAYOU CORNE

Site: None

Lab ID: 201015984

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 191126

Method: EPA 8260

Collected: 23-Aug-12

Received: 23-Aug-12

GCMS VOAs Water

Prepared: 23-Aug-12

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.00500	0.00500	23-Aug-12 21:02 RMP
100-41-4	Ethylbenzene	1	ND		0.00500	0.700	23-Aug-12 21:02 RMP
108-88-3	Toluene	1	ND		0.00500	1.00	23-Aug-12 21:02 RMP
	m&p-Xylene	1	ND		0.00500	10.0	23-Aug-12 21:02 RMP
95-47-6	o-Xylene	1	ND		0.00500	10.0	23-Aug-12 21:02 RMP

5 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Protocol 8/27/2012 10:04:41
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Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: DEQ LABORATORY

Client ID: 314 082312007 90 FB

Project: 20143290

Project ID: BAYOU CORNE

Site: None

Lab ID: 201015986

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 191126

Method: EPA 8260

GCMS VOAs Water

Collected: 23-Aug-12

Received: 23-Aug-12

Prepared: 23-Aug-12

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.00500	0.00500	23-Aug-12 21:22 RMP
100-41-4	Ethylbenzene	1	ND		0.00500	0.700	23-Aug-12 21:22 RMP
108-88-3	Toluene	1	ND		0.00500	1.00	23-Aug-12 21:22 RMP
	m&p-Xylene	1	ND		0.00500	10.0	23-Aug-12 21:22 RMP
95-47-6	o-Xylene	1	ND		0.00500	10.0	23-Aug-12 21:22 RMP

5 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Protocol 8/27/2012 10:04:41
Limits are corrected for sample size, dilution and moisture content if applicable.

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Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: DEQ LABORATORY

Client ID: 314 082312007 89 FB

Project: 20143290

Project ID: BAYOU CORNE

Site: None

Lab ID: 201015988

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 191126

Method: EPA 8260

GCMS VOAs Water

Collected: 23-Aug-12

Received: 23-Aug-12

Prepared: 23-Aug-12

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.00500	0.00500	23-Aug-12 23:44 RMP
100-41-4	Ethylbenzene	1	ND		0.00500	0.700	23-Aug-12 23:44 RMP
108-88-3	Toluene	1	ND		0.00500	1.00	23-Aug-12 23:44 RMP
	m&p-Xylene	1	ND		0.00500	10.0	23-Aug-12 23:44 RMP
95-47-6	o-Xylene	1	ND		0.00500	10.0	23-Aug-12 23:44 RMP

5 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Protocol 8/27/2012 10:04:42
Limits are corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: DEQ LABORATORY

Client ID: 314 082312007 89

Project: 20143290

Project ID: BAYOU CORNE

Site: None

Lab ID: 201015990

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 191126

Method: EPA 8260

Collected: 23-Aug-12

Received: 23-Aug-12

GCMS VOAs Water

Prepared: 24-Aug-12

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.00500	0.00500	24-Aug-12 00:04 RMP
100-41-4	Ethylbenzene	1	ND		0.00500	0.700	24-Aug-12 00:04 RMP
108-88-3	Toluene	1	ND		0.00500	1.00	24-Aug-12 00:04 RMP
	m&p-Xylene	1	ND		0.00500	10.0	24-Aug-12 00:04 RMP
95-47-6	o-Xylene	1	ND		0.00500	10.0	24-Aug-12 00:04 RMP

5 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Protocol 8/27/2012 10:04:42
Limits are corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: DEQ LABORATORY

Client ID: 314 082312007 88

Project: 20143290

Project ID: BAYOU CORNE

Site: None

Lab ID: 201015992

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 191126

Method: EPA 8260

Collected: 23-Aug-12

Received: 23-Aug-12

GCMS VOAs Water

Prepared: 24-Aug-12

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.00500	0.00500	24-Aug-12 00:24 RMP
100-41-4	Ethylbenzene	1	ND		0.00500	0.700	24-Aug-12 00:24 RMP
108-88-3	Toluene	1	ND		0.00500	1.00	24-Aug-12 00:24 RMP
	m&p-Xylene	1	ND		0.00500	10.0	24-Aug-12 00:24 RMP
95-47-6	o-Xylene	1	ND		0.00500	10.0	24-Aug-12 00:24 RMP

5 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Protocol 8/27/2012 10:04:42
Limits are corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: DEQ LABORATORY

Client ID: 314 082312007 88 FB

Project: 20143290

Project ID: BAYOU CORNE

Site: None

Lab ID: 201015994

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 191126

Method: EPA 8260

Collected: 23-Aug-12

Received: 23-Aug-12

GCMS VOAs Water

Prepared: 24-Aug-12

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.00500	0.00500	24-Aug-12 00:45 RMP
100-41-4	Ethylbenzene	1	ND		0.00500	0.700	24-Aug-12 00:45 RMP
108-88-3	Toluene	1	ND		0.00500	1.00	24-Aug-12 00:45 RMP
	m&p-Xylene	1	ND		0.00500	10.0	24-Aug-12 00:45 RMP
95-47-6	o-Xylene	1	ND		0.00500	10.0	24-Aug-12 00:45 RMP

5 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Protocol 8/27/2012 10:04:42
Limits are corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

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Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: DEQ LABORATORY

Client ID: 314 082312007 98

Project: 20143290

Project ID: BAYOU CORNE

Site: None

Lab ID: 201015976

Matrix: Water

%Moisture: n/a

Description: None

Collected: 23-Aug-12

Received: 23-Aug-12

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Limit
Chloride	SM 4500-Cl E	191052	100	3200	D1	mg/L	100.	23-Aug-12	23-Aug-12 15:23	JMA
Total Dissolved Solids	SM 2540C	191128	1	6680		mg/L	10.0	23-Aug-12	23-Aug-12 15:13	SMS2
2 parameter(s) reported										

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Inorganics 8/27/2012 10:04:43

Limits are corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: DEQ LABORATORY

Client ID: 314 082312007 98 DUP 1

Project: 20143290

Project ID: BAYOU CORNE

Site: None

Lab ID: 201015976 DUP 1

Matrix: Water

%Moisture: n/a

Description: None

Collected: 23-Aug-12

Received: 23-Aug-12

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Limit
Total Dissolved Solids	SM 2540C	191128	1	6580		mg/L	10.0	23-Aug-12	23-Aug-12 15:13	SMS2
1 parameter(s) reported										

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Inorganics 8/27/2012 10:04:43

Limits are corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: DEQ LABORATORY

Client ID: 314 082312007 131

Project: 20143290

Project ID: BAYOU CORNE

Site: None

Lab ID: 201015979

Matrix: Water

%Moisture: n/a

Description: None

Collected: 23-Aug-12

Received: 23-Aug-12

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Limit
Chloride	SM 4500-Cl E	191052	100	3150	D1	mg/L	100.	23-Aug-12	23-Aug-12 15:23	JMA
Total Dissolved Solids	SM 2540C	191128	1	6560		mg/L	10.0	23-Aug-12	23-Aug-12 15:14	SMS2

2 parameter(s) reported



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: DEQ LABORATORY

Client ID: 314 082312007 90

Project: 20143290

Project ID: BAYOU CORNE

Site: None

Lab ID: 201015984

Matrix: Water

%Moisture: n/a

Description: None

Collected: 23-Aug-12

Received: 23-Aug-12

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Limit
Chloride	SM 4500-Cl E	191052	100	2490	D1	mg/L	100.	23-Aug-12	23-Aug-12 14:59	JMA
Total Dissolved Solids	SM 2540C	191128	1	5070		mg/L	10.0	23-Aug-12	23-Aug-12 15:14	SMS2

2 parameter(s) reported



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: DEQ LABORATORY

Client ID: 314 082312007 89

Project: 20143290

Project ID: BAYOU CORNE

Site: None

Lab ID: 201015990

Matrix: Water

%Moisture: n/a

Description: None

Collected: 23-Aug-12

Received: 23-Aug-12

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Limit
Chloride	SM 4500-Cl E	191052	10	983.	D1	mg/L	10.0	23-Aug-12	23-Aug-12 14:50	JMA
Total Dissolved Solids	SM 2540C	191128	1	2130		mg/L	10.0	23-Aug-12	23-Aug-12 15:14	SMS2

2 parameter(s) reported



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: DEQ LABORATORY

Client ID: 314 082312007 88

Project: 20143290

Project ID: BAYOU CORNE

Site: None

Lab ID: 201015992

Matrix: Water

%Moisture: n/a

Description: None

Collected: 23-Aug-12

Received: 23-Aug-12

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Limit
Chloride	SM 4500-Cl E	191052	100	3770	D1	mg/L	100.	23-Aug-12	23-Aug-12 15:23	JMA
Total Dissolved Solids	SM 2540C	191128	1	7640		mg/L	10.0	23-Aug-12	23-Aug-12 15:14	SMS2

2 parameter(s) reported



Surrogate Recovery

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 191126

Project: 20143290

Method: Water GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201016007	191126 BLANK 1		98	113	88					
201016014	191126 BLANK 2		95	118	88					
201016008	191126 LCS 1		100	109	92					
201016015	191126 LCS 2		99	111	93					
201015979	314 082312007 131		92	116	89					
201015978	314 082312007 131 FB		92	114	88					
201015992	314 082312007 88		94	115	89					
201015994	314 082312007 88 FB		92	114	90					
201015990	314 082312007 89		93	113	89					
201015988	314 082312007 89 FB		91	112	87					
201015984	314 082312007 90		90	116	87					
201015986	314 082312007 90 FB		90	114	88					
201015976	314 082312007 98		94	115	87					
201015977	314 082312007 98 FB		91	113	87					
201016009	314 082312007 98 MS 1		95	114	94					
201016010	314 082312007 98 MSD 1		94	108	92					
QC limits:			68-124	72-126	79-119					
Sur 1: 4-Bromofluorobenzene (S)										
Sur 2: Dibromofluoromethane (S)										
Sur 3: Toluene-d8 (S)										

* denotes surrogate recovery outside of QC limits.

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.



Quality Control

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 191126 **Project:** 20143290 **LCS:** 201016008 23-Aug-12 10:52
Method: Water GC/MS Volatile Organics **MS:** 201016009 24-Aug-12 9:05
Units: ug/L **MSD:** 201016010 24-Aug-12 9:25
Original for MS: Client Sample 201015976

Parameter Name	LCS	LCS	LCS	MS	Sample	MS	MSD	MS	MSD	RPD	QC Limits		Max	Qu
	Spike	Found	%Rec	Spike	Found	Found	Found	%Rec	%Rec		LCS	MS/MSD	RPD	
Benzene	50.0	51.3	103	50.0		53.0	52.4	106	105	1	66-132	58-140	20	
Ethylbenzene	50.0	50.9	102	50.0		50.6	50.4	101	101	0	71-130	65-136	20	
Toluene	50.0	47.8	96	50.0		49.3	48.4	99	97	2	68-131	60-137	20	
m&p-Xylene	100.	107.	107	100.		105.	106.	105	106	0	68-134	62-139	20	
o-Xylene	50.0	53.0	106	50.0		51.3	51.6	103	103	1	67-131	61-137	20	

5 compound(s) reported



Quality Control

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 191126
Method: Water GC/MS Volatile Organics

Project: 20143290 **LCS:** 201016015 23-Aug-12 23:24

MS:

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits		Max	Qu
											LCS	MS/MSD	RPD	
Benzene	50.0	51.0	102											66-132
Ethylbenzene	50.0	49.9	100											71-130
Toluene	50.0	48.1	96											68-131
m&p-Xylene	100.	104.	104											68-134
o-Xylene	50.0	51.5	103											67-131

5 compound(s) reported



Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 191126 BLANK 1

Project: 20143290

Lab ID: 201016007

Prep Level: Water

Batch: 191126

Method: Water GC/MS Volatile Organics

Prepared: 23-Aug-12

						Units: <u>ug/L</u>		
CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit		Analysis	
71-43-2	Benzene	1	ND		5.00		23-Aug-12 10:31	RMP
100-41-4	Ethylbenzene	1	ND		5.00		23-Aug-12 10:31	RMP
108-88-3	Toluene	1	ND		5.00		23-Aug-12 10:31	RMP
	m&p-Xylene	1	ND		5.00		23-Aug-12 10:31	RMP
95-47-6	o-Xylene	1	ND		5.00		23-Aug-12 10:31	RMP
5 compound(s) reported								

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Protocol Blank 8/27/2012 10:04:4

Limits are corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 191126 BLANK 2

Project: 20143290

Lab ID: 201016014

Prep Level: Water

Batch: 191126

Method: Water GC/MS Volatile Organics

Prepared: 23-Aug-12

						Units: <u>ug/L</u>		
CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit		Analysis	
71-43-2	Benzene	1	ND		5.00		23-Aug-12 23:03	RMP
100-41-4	Ethylbenzene	1	ND		5.00		23-Aug-12 23:03	RMP
108-88-3	Toluene	1	ND		5.00		23-Aug-12 23:03	RMP
	m&p-Xylene	1	ND		5.00		23-Aug-12 23:03	RMP
95-47-6	o-Xylene	1	ND		5.00		23-Aug-12 23:03	RMP
5 compound(s) reported								

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Protocol Blank 8/27/2012 10:04:4
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Inorganics Quality Control

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20143290

Parameter	Batch	Blank	Units	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits		Max	Qu
														LCS	MS/MSD	RPD	
Chloride	191052	< 1.00	mg/L	69.0	64.3	93	100.	19.6	109.		90		0	90-110	75-125	20	
Total Dissolved Solid	191128	< 10.0	mg/L	100.	89.0	89							2	80-120		20	

* denotes recovery outside of QC limits.

MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.



Sample Results
Tentatively Identified Compounds

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: DEQ LABORATORY

Client ID: 314 082312007 89

Project No.: 20143290

Project: BAYOU CORNE

Site: None

Lab ID: 201015990

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 191126

Method: GCMS VOAs Water

Collected: 23-Aug-12

Received: 23-Aug-12

Prepared: 24-Aug-12

Units: mg/L

CAS No.	RT	Tentatively Identified Compound	Dilution	Result	Qu	Analysis
000075-28-5	1.62	Isobutane	1	38.9	J A1	24-Aug-12 00:04 RMP
000106-97-8	1.75	Butane	1	34.7	J A1	24-Aug-12 00:04 RMP
000078-78-4	2.21	Butane, 2-methyl-	1	10.7	J A1	24-Aug-12 00:04 RMP
000109-66-0	2.45	Pentane	1	6.19	J A1	24-Aug-12 00:04 RMP
4 TIC(s) reported						

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

TICs 8/27/2012 10:04:59
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit



Definitions/Qualifiers

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20143290

Value	Description
A1	The reported values are estimated concentrations determined using a relative response factor of 1.0 for these analytes. Quantitation was based upon the nearest internal standard free of interferences.
D1	The analysis was performed at a dilution due to the high analyte concentration.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.

Chains of Custody

INTERNAL CHAIN OF CUSTODY

EPN/SDG #:

Client:

Analytical Fraction:

20143290
DEO

PACE ID	CLIENT ID	PACE ID	CLIENT ID
201015976	314-082312007 98	201015994	314 082312007 88 FB
977	314-082312007 98 FB		
978	314-082312007 131 FB		
979	314-082312007 131		
984	314-082312007 90		
986	314-082312007 90 FB		
988	314-082312007 89 FB		
990	314-082312007 89		
992	314-082312007 88		

DATE	RELINQUISHED BY	RECEIVED BY	COMMENTS
8-23-12	Printed Name: J Milley Signature: J Milley	Printed Name: TRACY EASLEY Signature: Tracy Easley	
	Printed Name: Signature:	Printed Name: Signature:	
	Printed Name: Signature:	Printed Name: Signature:	
	Printed Name: Signature:	Printed Name: Signature:	
	Printed Name: Signature:	Printed Name: Signature:	
	Printed Name: Signature:	Printed Name: Signature:	
	Printed Name: Signature:	Printed Name: Signature:	
	Printed Name: Signature:	Printed Name: Signature:	
	Printed Name: Signature:	Printed Name: Signature:	
	Printed Name: Signature:	Printed Name: Signature:	

INTERNAL CHAIN OF CUSTODY

EPN/SDG #:

Client:

Analytical Fraction:

20143290
DEO

PAGE ID	CLIENT ID	PAGE ID	CLIENT ID
201015976	314-082312007 98	201015994	314 082312007 88 FB
977	314-082312007 98FB		
978	314-082312007 131 FB		
979	314-082312007 131		
984	314-082312007 90		
986	314-082312007 90FB		
988	314-082312007 89 FB		
990	314-082312007 89		
992	314-082312007 88		

DATE	RELINQUISHED BY	RECEIVED BY	COMMENTS
8-23-12	Printed Name: Smiley Signature: [Signature]	Printed Name: [Signature] Signature: [Signature]	
	Printed Name: Signature:	Printed Name: Signature:	
	Printed Name: Signature:	Printed Name: Signature:	
	Printed Name: Signature:	Printed Name: Signature:	
	Printed Name: Signature:	Printed Name: Signature:	
	Printed Name: Signature:	Printed Name: Signature:	
	Printed Name: Signature:	Printed Name: Signature:	
	Printed Name: Signature:	Printed Name: Signature:	
	Printed Name: Signature:	Printed Name: Signature:	
	Printed Name: Signature:	Printed Name: Signature:	

20143290

Name: BOYON CORNE ID# 182981
 Address: 602 N. FIRST
 Location: PB EUGENE
 Parish: ASSUMPTION Team Leader: DANLON
 Permit Number/Inspector's Log Number: 314
 Additional Team Members: LAURE PEACOCK
 List any Field Data Sheets that accompany the sample _____
 Office _____ Org # _____ Project Code _____

[illegible][illegible][illegible]

*AL=Air Lab, BL=Bioassay Lab, RL-Radiation Lab, WL=Water Lab

20143290

CHAIN OF CUSTODY		Requested Analysis		Additional Comments:	
Name: <u>BAYOU COMBE</u>	ID# <u>182981</u>				
Address: <u>602 N. 5TH ST</u>					
Location: <u>POBENON</u>					
Parish: <u>ASSUMPTION</u>	Team Leader: <u>DOMINON</u>				
Permit Number/Inspector's Log Number: <u>314</u>					
Additional Team Members: <u>Laurie Peacock</u>					
List any Field Data Sheets that accompany the sample					
Office	Org #				
	Project Code				

[illegible][illegible][illegible]

*AL=Air Lab, BL=Bioassay Lab, RL-Radiation Lab, WL=Water Lab

CHAIN OF CUSTODY

Name: <u>BAYOU CORNE</u>		ID# <u>182981</u>
Address: <u>602 N. 5th ST.</u>		
Location: <u>Crestview</u>		
Parish: <u>ASSUMPTION</u>	Team Leader: <u>DONALD</u>	
Permit Number/Inspector's Log Number: <u>314</u>		
Additional Team Members: <u>Laurie Pearce</u>		
List any Field Data Sheets that accompany the sample _____		
Office _____	Org # _____	Project Code _____

[illegible][illegible]

Page 1 of 1

Additional Comments:

#	Requested Analysis	Result
1	COINTEGRATION	YES
2	COINTEGRATION	YES
3	COINTEGRATION	YES
4	COINTEGRATION	YES
5	COINTEGRATION	YES
6	COINTEGRATION	YES
7	COINTEGRATION	YES
8	COINTEGRATION	YES
9	COINTEGRATION	YES
10	COINTEGRATION	YES
11	COINTEGRATION	YES
12	COINTEGRATION	YES
13	COINTEGRATION	YES
14	COINTEGRATION	YES
15	COINTEGRATION	YES
16	COINTEGRATION	YES
17	COINTEGRATION	YES
18	COINTEGRATION	YES
19	COINTEGRATION	YES
20	COINTEGRATION	YES
21	COINTEGRATION	YES
22	COINTEGRATION	YES
23	COINTEGRATION	YES
24	COINTEGRATION	YES
25	COINTEGRATION	YES
26	COINTEGRATION	YES
27	COINTEGRATION	YES
28	COINTEGRATION	YES
29	COINTEGRATION	YES
30	COINTEGRATION	YES
31	COINTEGRATION	YES
32	COINTEGRATION	YES
33	COINTEGRATION	YES
34	COINTEGRATION	YES
35	COINTEGRATION	YES
36	COINTEGRATION	YES
37	COINTEGRATION	YES
38	COINTEGRATION	YES
39	COINTEGRATION	YES
40	COINTEGRATION	YES
41	COINTEGRATION	YES
42	COINTEGRATION	YES
43	COINTEGRATION	YES
44	COINTEGRATION	YES
45	COINTEGRATION	YES
46	COINTEGRATION	YES
47	COINTEGRATION	YES
48	COINTEGRATION	YES
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51	COINTEGRATION	YES
52	COINTEGRATION	YES
53	COINTEGRATION	YES
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68	COINTEGRATION	YES
69	COINTEGRATION	YES
70	COINTEGRATION	YES
71	COINTEGRATION	YES
72	COINTEGRATION	YES
73	COINTEGRATION	YES
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76	COINTEGRATION	YES
77	COINTEGRATION	YES
78	COINTEGRATION	YES
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81	COINTEGRATION	YES
82	COINTEGRATION	YES
83	COINTEGRATION	YES
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85	COINTEGRATION	YES
86	COINTEGRATION	YES
87	COINTEGRATION	YES
88	COINTEGRATION	YES
89	COINTEGRATION	YES
90	COINTEGRATION	YES
91	COINTEGRATION	YES
92	COINTEGRATION	YES
93	COINTEGRATION	YES
94	COINTEGRATION	YES
95	COINTEGRATION	YES
96	COINTEGRATION	YES
97	COINTEGRATION	YES
98	COINTEGRATION	YES
99	COINTEGRATION	YES
100	COINTEGRATION	YES

Split Samples Accepted? _____		If yes, Accepted By: _____		Sample Number _____
Name: _____				
Signature: _____				
Sample #(s): _____				
CHAIN OF CUSTODY				
Relinquished By: _____	Date _____	Time _____	Received By: _____	
_____	083312	1430	_____	1430
Recommended Sample Disposition: _____				Final Sample Disposition: _____

Date:



1000 Riverbend Blvd., Suite F
St. Rose, LA 70087

Sample Condition

2 20143290 20-DEQ LAB 2



Courier: ☐ Pace Courier ☐ Hackbarth ☐ Fed X ☐ UPS ☐ DHL ☐ USPS ☒ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC]

Custody Seals Intact: ☐ Yes ☒ No

Thermometer
Used:

- ☒ Therm Fisher IR 1
☐ Therm Fisher IR 2
☐ Therm Fisher IR 4

Type of Ice: Wet Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining
contents: 8-23-12 mm

Temp must be measured from Temperature blank when present

Comments:

Temperature Blank Present?"	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	1
Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2
Chain of Custody Complete:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8
Filtered vol. Rec. for Diss. tests	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	9
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10
All containers received within manufacture's precautionary and/or expiration dates.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11
All containers needing preservation have been checked (except VOA, coliform, & O&G).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13
If No, was preservative added? <input type="checkbox"/> Yes <input type="checkbox"/> No		
If added record lot no.: HNO3 _____ H2SO4 _____		
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	17
Pace Trip Blank Lot # (if purchased): <u>N/A</u>		18

Client Notification/ Resolution:

Person Contacted: _____

Date/Time: _____

Comments/ Resolution: _____